

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGIONS

77 EAST ALTON BOULEVARD
CHICAGO, IL 60603-6000

EP

2 2

RE: CERTIFIED MAIL NUMBER:

WN 161

**CERTIFIED MAIL 7009 1680 0000 7648 0178
RETURN RECEIPT REQUESTED**

Paul Novak Manager
 Permits Compliance Section
 Division of Surface Water
 Ohio Environmental Protection Agency
 50 West Town Street, Suite 700
 Columbus, Ohio 43215

Dear Mr. Novak,

Re: NPDES permit for American Energy Corporation - Bennoc Refuse Area

On September 6, 2013, Dan Hill of your office sent an email message to Krista McKim and Patrick Kuebler of my staff, with a working draft National Pollutant Discharge Elimination System (NPDES) permit for American Energy Corporation's Century Mine - Bennoc attached. The Clean Water Act (CWA) and the U.S. Environmental Protection Agency's implementing regulations require that NPDES permits include technology-based effluent limitations and any more stringent water quality based effluent limitations (WQBELs) necessary to meet state water quality standards. In a letter dated July 3, 2013, EPA expressed concern about the adequacy of the WQBELs contained in a draft permit that the Ohio Environmental Protection Agency (OEPA) had public noticed on October 30, 2012. A copy of that letter is enclosed. EPA is informally reviewing the working draft sent on September 6, 2013. We note based on our review to date that the WQBELs for the total dissolved solids and sulfates have been removed from this draft permit. We look forward to working with OEPA to ensure that the permit that is ultimately issued is consistent with the water quality based requirements of the CWA.

To assist EPA in its informal review of the permit, we request that OEPA provide a written explanation as to why it believes that the working draft permit that was sent on September 6, 2013, is consistent with the water quality based requirements of the CWA and EPA's implementing regulations. The written explanation should include, but not necessarily be limited to, an explanation as to whether the permit needs to include WQBELs for total dissolved solids and sulfates and, if not, why not. Please also provide an explanation as to how the permit addresses each of the issues listed in EPA's July 3, 2013, letter (see enclosure).

As you know, Sections V.C. - V.E. of the NPDES Memorandum of Agreement (MOA) between EPA and OEPA specify the steps that OEPA must take to initiate EPA's 90-day formal review

period under Section 402(d)(2) of the CWA and 40 C.R. 123.44(d) before OEPA can finalize any NPDES permit. Specifically, if OEPA intends to finalize a permit that differs from the draft permit that OEPA public noticed on October 30, 2012, then Section V.C. of the MOA requires that OEPA transmit the proposed NPDES permit to the Region, together with a copy of all statements received from the public notice. If OEPA intends to finalize a permit that is identical to the public noticed draft permit, then Section V.D of the MOA requires that OEPA transmit a letter to EPA indicating that OEPA intends to finally issue the draft permit that had been publicly noticed without any changes, and must include with the letter a copy of all statements received from the public notice. OEPA has not yet taken these required steps.

Once the proposed permit has been prepared, we request that OEPA transmit to EPA copies of the clearly identified proposed permit and all public comments in accordance with Section V of the MOA. OEPA may transmit the proposed permit to EPA via email rather than United States Mail, provided that any such email transmission also includes all public comments in accordance with Sections V.C and V.D of the MOA. In this regard, please inform us in writing whether OEPA has a projected date by which it intends to transmit the proposed permit to EPA and, if so, what that date is.

We look forward to receiving the requested information and assisting you in addressing any permit issues. If you should have any questions regarding this letter, feel free to contact me or Janet Pellegrini of my staff at 312-886-4298 or pellegrini.janet@epa.gov or my Prichard of the Office of Regional Counsel, 312-353-0570, prichard.ra@epa.gov.

Sincerely,

Kevin M. Pierard, Chief
NPDES Programs Branch

Enclosure

cc: American Energy Corporation (John M. Nagel Coordinator Environmental Compliance)
Certified Mail Return Receipt 7009 1680 0000 7648 0215

Eric Nygaard - OEPA
Brian - all OEPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
FEDERAL CENTER
ESTATESON BOULEVARD
C. CAGO, D.C. 20460

3-13

PERMITTING SECTION

CERTIFIED MAIL 7009-1680-0000 7675 1698
RETURN RECEIPT REQUESTED

George E Maraghy Chief
Surface Water Division
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Re: U.S. EPA Comments on Draft National Pollutant Discharge Elimination System (NPDES) Permit
Permit: American Energy Corporation/Century Mine (Bennie Reuse Disposal Area) - Altonia
Ohio Permit No. O-1001591-A Application No. O-0144576

Dear Mr. Maraghy:

The U.S. Environmental Protection Agency has reviewed the Draft NPDES Permit (Permit) and Public Notice/Fact Sheet dated October 30, 2012 (as you may recall, on December 19, 2012, EPA notified the Ohio Environmental Protection Agency (OEPA) by the enclosed letter that EPA did not receive a complete record for the Permit). As a result, we were unable to complete our review of the Permit. The December 19, 2012 letter also specified the conditions per the Memorandum of Agreement with OEPA that OEPA must meet prior to final issuance of the Permit. In response, EPA submitted additional information regarding the subject facility which was received on December 26, 2012 and January 4, 2013. The additional information included American Energy Corporation's (AEC) comments on the Permit. Recently, on June 12, 2013, OEPA issued a 30-day extension to the public comment period for the Permit, which expires on July 12, 2013.

EPA has identified the following significant issues which, if not corrected, may prompt EPA to object to the Permit:

- 1. The Permit does not contain the appropriate limit for sulfate in order to be protective of the water quality criterion for the receiving stream (40 C.F.R. 122.44(d)).

EPA would include an effluent limitation for sulfate in the permit of 1684 mg/L. This limitation was derived using OEPA's spreadsheet which had the following formula:

$$\text{Acute WQS for Sulfate} = 1270.7 \times 5.508(\text{hardness})^{-1.457}(\text{chloride})^{+0.65}$$

EPA used the same inputs as AEC and OEPA, which were the average of values from the OEPA online water quality map for Piney Creek at Stat. Rout 148, hardness = 283 mg/L chloride = 168. OEPA proposed a sulfate limit of 2435 mg/L based on applying the water quality criterion to the downstream Piney Creek, but not to the unnamed tributaries.

to Piney Creek to which the facility actually discharges. The Ohio calculation used the effluent hardness and chloride values of 500 mg/L and 15 mg/L respectively. EPA would protect the unnamed tributaries and Piney Creek but would use the Piney Creek hardness and chloride values. The sulfate standard of 14 mg/L would be applied as the sulfate limit because the permit and supporting information did not contain sufficient information (i.e., flows, flow determination methods, receiving stream water chemistry data) to estimate a sulfate dilution factor for the unnamed tributaries. Additionally, EPA does not agree with OEPA's use of the 1.5 multiplier for deriving Inside Mixing Zone Maximum Criteria (IMZM) values from Outside Mixing Zone Maximum Criteria (OMZM) values, since insufficient information is available to allow for dilution in the unnamed tributaries.

The Permit does not contain a numeric limit for TDS, inadequately limits the duration of discharge, and lacks limitations for low-flow conditions and, therefore, does not protect the receiving water regarding chronic exposure. (40 C.F.R. § 122.44(d))

EPA would include monthly average and maximum daily water quality based effluent limits for TDS based on Ohio's numeric water quality standard of 1500 mg/L. If the applicant wishes to pursue an intermittent discharge scenario as an enforceable provision in the Permit, EPA would consider alternative methods of implementing the TDS standard. To ensure protection based on chronic exposure, such an alternative method should be consistent with federal regulations and guidance.

OEPA's Captina Creek Watershed Report DS-TEAS 2010-4-1, which includes the receiving waters for this Permit, Piney Creek and unnamed tributaries, notes macroinvertebrate communities are significantly less diverse in lower Piney Creek than in similar Captina Creek tributaries and notes the absence of mayflies due to mine discharges in the watershed. OEPA, during its consideration of the WLA or TDS in setting this Permit's limits and conditions, must include a restriction to discharges during low-flow conditions to address cumulative impacts to receiving waters.

The monitoring frequency for Pond #001, for several parameters, of once every 2 weeks, is insufficient and inconsistent with monitoring frequencies for Pond #002 for same parameters at twice a week. (40 C.F.R. § 122.44(d)(1))

EPA would increase Pond #001 monitoring frequencies to twice a week for pH, TSS, chloride, sulfate, selenium, iron and manganese.

The Permit does not contain limits or requirements for Whole Effluent Toxicity (WET) monitoring and testing. (40 C.F.R. § 122.44(d)(1)-(v))

EPA would include a limit for acute toxicity if the discharge regime is non-continuous and for chronic toxicity if a continuous discharge regime is contemplated.

The Permit, as currently written, does not sufficiently ensure assessment for effluent impacts to receiving streams, aquatic biota, if the discharge is of a continuous nature (40 C.F.R. 122.44(d)(1)).

In order to ensure that the narrative standard of no toxics in toxic amounts is implemented in the Permit, EPA would require in-stream bio monitoring upstream and downstream of the discharge in Piney Creek. The Permit would require biological and water quality sampling and monitoring in Piney Creek upstream and downstream of where the Benhoe... discharges come into Piney Creek. The upstream sampling and monitoring locations would be required to be downstream of impacts from other discharges. Additionally, sampling and monitoring would be required in accordance with OEPA and EPA procedures and standard methods.

Sampling and monitoring would include:

- i Stream Habitat Evaluation
 - ii Physical Habitat Evaluation
 - iii Biological Community Assessment and
 - iv Surface Water Chemistry
- Water sample collection would be required in accordance with appropriate methods, as outlined in Parts II and III of the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices. Water parameters to be sampled for must include: sulfate, total suspended solids (TSS), total dissolved solids (TDS), acidity, alkalinity, conductivity, chloride, pH, dissolved oxygen, hardness, and the following metals: aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium (total), chromium (hexavalent), cobalt, copper, iron, lead, manganese, magnesium, mercury, nickel, potassium, selenium⁺, silver, sodium, thallium, vanadium, zinc, cyanide (total) and cyanide (amenable). Field measurements of dissolved oxygen, pH, temperature, and conductivity would be required. Analytical methods required would be in accordance with 40 C.F.R. Part I, and OEPA's Manual of Laboratory Operating Procedures. Low level method shall be used for Selenium, such that the quantitation level is 1.0 ug/L.
- v Field Quality Control Samples
- Quality control requirements are also found in the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices.
- vi EPA would include a permit condition to require submittal of a sampling and monitoring plan and annual reports documenting findings and results.

In addition to the issues described above, EPA could identify additional potential objections if any of the following occurs:

- a Prior to the actual date of issuance of a Proposed Permit, an effluent guideline or standard is promulgated which is applicable to the permit and which would require revision or modification of a limitation or condition set forth in the Draft Permit.

- A variance is granted and the Permit is modified to incorporate the results of that variance.
- c. There are additional revisions to be incorporated into the Permit which have not been agreed to by EPA; or
- d. EPA learns of new information, including as the result of public comments, that causes EPA to reconsider its position.

We look forward to working with you to resolve the issues identified above. Our goal is to ensure that the Permit complies with the CAA and EPA's implementing regulations prior to OEPA proposing the Permit for final issuance.

When the revised Permit is prepared, please forward one copy and any comments received during any public notice period to Janet Pellegrini of my staff at NPDES Programs Branch, 401 M. St. SW, Washington, DC 20460. If you have any questions related to EPA's review, please call me or have your staff contact Ms. Pellegrini at (202) 564-8866 or by Email at pellegrini.d@epa.gov.

Thank you for your cooperation during the review process and your thoughtful consideration of our comments.

Very truly yours,

Kevin M. Pierard, Chief
NPDES Programs Branch

Enclosure

cc: American Energy Corporation (Certified Mail Return Receipt 7009 1680 0000 7678 5587)
Eric Nygaard, Permit Writer, OEPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 E. ST. ALICKSON, DULLE APD
C. C. CO. U.S.D.O. 35.0

107-110700000

WIN 161

George Elmaghly, Chief
Surface Water Division
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Re: U.S. Environmental Protection Agency Request for Complete Record Pertaining to Draft NPDES Permit American Energy Corporation-Central Mine (Bennet Refuse Disposal Area) Alameda, Ohio Permit No. 01100-39-A Application No. 144575

Dear Mr. Elmaghly:

The U.S. Environmental Protection Agency has reviewed the draft National Pollutant Discharge Elimination System Permit and supporting documents provided for the Alum Central Mine Refuse Disposal that were received by EPA on November 6, 16.2 Because of the limited amount of information provided to EPA by the Ohio Environmental Protection Agency (Ohio EPA) in date regarding this permit, EPA is unable to complete our review and determine whether the draft permit meets the guidelines and requirements of the Clean Water Act. To enable us to complete our review, we request the complete record of the permit proceedings relative to Permit No. 01100-39-A. The complete record should include, but is not limited to, information that the petitioner provided to Ohio EPA as required by 40 CFR 122.21(g)(1-7). We also request copies of any public comments that Ohio EPA has received on the draft permit.

I encourage your staff to work with Janet Pellegrini of my staff to transmit the complete permit record to resolve any issues that may exist with the draft permit prior to EPA proposing the permit for final issuance. Please note that once Ohio EPA decides that it is ready to finalise the permit, Ohio EPA must transmit the proposed permit to EPA in accordance with Sections V.C. and V.D. of our Memorandum Agreement (MOA) with the EPA prior to final issuance of the permit. In accordance with Section V.E of the MOA, Ohio EPA may not proceed to finalise the permit until it receives a letter from EPA indicating that it is not objecting to the permit or the 10-day periods specified in the MOA have passed and Ohio EPA has not received any comment from EPA. Finally, EPA can object to the draft permit (i.e., the permit that Ohio EPA initially noticed and sought public comment on) at any time prior to the date that Ohio EPA transmits the proposed permit to EPA, or EPA reviews in accordance with Section V.C and V.D. of the MOA.

I thank you for your cooperation during the review process. If you have any questions relate to E.A.'s review, please contact me or another of my staff. My office can be reached by telephone at 312-356-6766 or by Email at kue_rpa@epa.gov.

Sincerely,

Kevin Richard Kue
NBB-S Prog A - wmcn

cc: American Energy Corporation
Eric Nygaard - his EP